

**CALFED Bay-Delta Program Project Information Form  
Watershed Program – Full Proposal Cover Sheet**

***Attach to the cover of full proposal. All applicants must fill out this Information Form for their proposal. Failure to answer these questions and include them with the application will result in the application being considered nonresponsive and not considered for funding.***

1. Full Proposal Title: Butte Creek Watershed Floodplain Management Plan  
Proposal Title/Number: \_\_\_\_\_  
Applicant: Butte Creek Watershed Conservancy  
Applicant Name: James Charles Kutz  
Applicant Mailing Address: P.O. Box 1611, Chico, CA 95927  
Applicant Telephone: 530-893-5399 Applicant Fax: \_\_\_\_\_ Applicant Email: creek@inreach.com  
Fiscal Agent Name (if different from above): Stuart Edell, Department of Public Works  
Fiscal Agent Mailing Address: 7 County Center Drive, Oroville, CA 95965  
Fiscal Agent Telephone: 530-538-7266 Fiscal Agent Fax: 530-538-7683 Fiscal Agent Email: sedell@buttecounty.net

2. Type of Project: Indicate the primary topic for which you are applying (check only one)

<input type="checkbox"/> Assessment	<input type="checkbox"/> Monitoring
<input type="checkbox"/> Capacity Building	<input type="checkbox"/> Outreach
<input type="checkbox"/> Education	<input checked="" type="checkbox"/> Planning
<input type="checkbox"/> Implementation	<input type="checkbox"/> Research

3. Type of Applicant:

<input type="checkbox"/> Academic Institution/University	<input checked="" type="checkbox"/> Non-Profit
<input type="checkbox"/> Federal Agency	<input type="checkbox"/> Private party
<input type="checkbox"/> Joint Venture	<input type="checkbox"/> State Agency
<input checked="" type="checkbox"/> Local Government	<input type="checkbox"/> Tribe or Tribal Government

4. Location (including County):

What major watershed is the project primarily located in:

☐ Klamath River (Coast and Cascade Ranges)  
☒ Sacramento River (Coast, Cascade and Sierra Ranges)  
☐ San Joaquin River (Coast and Sierra Ranges)  
☐ Bay-Delta (Coast and Sierra Ranges)  
☐ Southern CA (coast and Sierra Ranges)  
☐ Tulare Basin (Coast, Sierra and Tehachapi Ranges)

5. Amount of funding requested: \$640,000  
Cost share/in-kind partners: ☒ Yes ☐ No  
Identify partners and amount contributed by each:

Butte County and Conservancy: \$144,000.

6. Have you received funding from CALFED before? ☒ Yes ☐ No  
If yes, identify project title and source of funds:

Butte Creek Watershed Existing Conditions Report, April 2000 – CALFED Category III  
Butte Creek Watershed Management Strategy, November 2000 – CALFED Category III

By signing below, the applicant declares the following:

1. The truthfulness of all representations in their proposal
2. The individual signing this form is entitled to submit the application on behalf of the applicant (if the applicant is an entity or an organization)
3. The person submitting the application has read and understood the conflict of interest and confidentiality discussion in the Watershed Program Proposal Solicitation Package and waives any and all rights to privacy and confidentiality of the proposal on behalf of the applicant, to the extent provided in the Proposal Solicitation Package.

James Charles Kutz

Printed name of applicant

Signature of applicant

## **CALFED BAY-DELTA WATERSHED PROGRAM FULL PROPOSAL**

- 1. Describe your project, its underlying assumptions, expected outcomes, timetable for completion, and general methodology or process.**

### **Project Description**

The Butte Creek Watershed Conservancy (Conservancy) is engaged in a stakeholder-driven process to facilitate coordinated management of resources to maintain a sustainable river ecosystem for the Butte Creek watershed. Through this process, the Conservancy has adopted a Watershed Management Strategy (WMS) to address issues and concerns deemed important to stakeholders. These are:

- |                                      |                                 |
|--------------------------------------|---------------------------------|
| 1. Education and Public Outreach     | 5. Groundwater and Water Supply |
| 2. Recreation                        | 6. Water Quality                |
| 3. Fisheries                         | 7. Flooding                     |
| 4. Fuel Load/Timber Management/Roads |                                 |

Recognizing that flooding, and the consequences of flooding impact or are impacted by activities related to the six other issues and concerns, the Conservancy identified developing a Floodplain Management Plan as a priority action. Education and public outreach, which also was identified by stakeholders as an important issue will, by necessity, be an important aspect of developing a Floodplain Management Plan. Conducting the education and public involvement task will provide the opportunity to advance public awareness that affects the environmental health of the watershed.

The Butte Creek Watershed Floodplain Management Plan, developed through this stakeholder-driven process, will provide guidelines for landowners, private and public, and federal, state, and local governments to enhance public health and safety and to restore and sustain environmental resources in the watershed

### **Underlying Assumptions/Demonstrated Need**

The Conservancy was formed knowing that the cultural, economic, and ecological heritage of the Butte Creek watershed could be restored and enhanced most effectively through watershed-wide landowner action. The need for a watershed-wide approach was reinforced through the stakeholder process that was conducted in preparing the Butte Creek Watershed Existing Conditions Report, April 2000.

The Butte Creek Existing Conditions Report, and the Butte Creek Watershed Management Strategy, both of which highlight stakeholder interest and the need for advancing watershed management, were prepared with grant funds from the U.S. Fish and Wildlife Service, the National Fish and Wildlife Foundation, and CALFED Category III (Metropolitan Water District of Southern California), with administrative oversight from the CSU, Chico University Foundation Office of Sponsored Projects.

As noted in the Project Description, addressing the issue of flooding in the form of a Watershed Floodplain Management Plan is deemed the priority action. Noted below are the goal and objectives with implementation strategies from the Watershed Management Strategy.

### **Goal: Minimize environmental impacts of required flood management.**

Objective #1 -- Utilize relative information to develop flood protection measures that protect life and property and enhance fish and wildlife habitat.

Implementation I.A. -- Work with interested stakeholders and federal, state, and local agencies to develop a Butte Creek Watershed Floodplain Management Plan that enhances flood management and natural channel processes.

Implementation I.B. -- To protect flood-prone areas of Butte Creek, inform landowners about the pros and cons of easements and the impacts of building in the floodplain.

Objective #2 -- Support improved performance and coordination among and within agencies responsible for providing flood protection, post-flood restoration, and protection of habitat.

Implementation 2.A. -- Develop a committee to work with federal, state, and local agencies to enhance public awareness, flood management, and fish and wildlife habitat.

Objective #3 -- Support the development of pre-flood emergency response management.

### **Expected Outcome**

The expected outcome of the process to develop a Watershed Floodplain Management Plan is twofold: First, it is expected the stakeholder-driven process, initiated by developing the Existing Condition Report and Water Management Strategy, will be strengthened. Second, it is expected the Plan will be comprised of recommended Action Items, which will be identified for immediate implementation or medium to long-term implementation. These action items will provide management tools (public and private landowner outreach and overview procedures, scientific/technical committee monitoring, flood control responsibility flow charts, etc.) and specific measures to reduce the risk to public health, safety, and property damage. These tools will outline strategies for rescue and evacuation protocol, reducing the potential for bank and floodplain erosion, thereby reducing sediment nonpoint source pollution in Butte Creek. By reducing the potential for flood impacts on homes and businesses, the Plan will reduce the risk of chemical releases during flood events. Likewise, the potential for flood inundation to contaminate wellheads and groundwater systems will be reduced.

Measurable water quality improvements will be achieved from a coordinated Floodplain Management Plan. A partial list of these improvements includes: reducing water supply contamination by floodwaters, lower erosion, reduce silt loads on streams and tributaries, protect groundwater quality from flooded wells, improve water quality, coordinate flood hazard mitigation procedures, and wildlife habitat protection by adaptive management measures.

By following the methodology established by the FEMA National Flood Insurance Program's Community Rating System new sources of funding opportunities will become available to implement specific recommendations contained in the Floodplain Management Plan. Several federal funding programs require or strongly recommend a plan as a prerequisite for assistance.

By establishing a government- approved and citizen-overviewed Floodplain Management Plan, future grant seekers will have a solid planning base. An approved Floodplain Management Plan will also reduce the costs of applying for future grants.

A successful Butte Creek Watershed Floodplain Management Plan will be the first of its kind in Northern California. Other counties and watersheds will be able to use the Butte Creek Floodplain Plan as a template and example to develop Floodplain Management Plans. Many of the specific recommendations will be applicable to other watersheds.

### **General Methodology or Process**

The development of the Butte Creek Floodplain Management Plan will employ a task outline and planning process that assures the completed Plan will be recognized by the **FEMA National Flood Insurance Program's Community Rating System (CRS)**. The CRS awards credits to communities that implement measures to protect natural and beneficial floodplain functions. The CRS is an incentive program whereby communities that exceed the minimum requirements of the **NFIP (The National Flood Insurance Reform Act)** secure reductions in the flood insurance premiums for their residents. CRS credit is based on the 10-step planning process described in Subsections aCj, in Section 511 in the CRS Coordinators Manual.

A comprehensive outline of this planning process can be seen on the Internet at this address:

<http://www.Colorado.EDU/hazards/informer/infrmr1/infrmr1a.htm#intro1>

To accomplish the goal of developing a **Butte Creek Watershed Floodplain Management Plan** the Conservancy formulated a systematic approach that includes the following steps:

1. Initiate a stakeholder participation process.
2. Gather existing studies, plans, and projects to document existing conditions.
3. Establish management plan priorities.
4. Seek funding to expand the stakeholder process and define priority actions.

5. Seek funding to implement action items.

The Conservancy has effectively accomplished Step 1 through Step 3, with Step 3 being the decision to proceed initially with the Floodplain Management Plan. Upon obtaining funding, the Conservancy will implement a program to develop the Floodplain Management Plan. The Scope of Work noted below will be refined at the onset of the program with the benefit of early stakeholder participation.

#### **SCOPE OF WORK AND TIMELINE**

<b>Task</b>	<b>Description</b>	<b>Completion Date</b>
1. Project Management and Administration	Provide technical and administrative services.	Ongoing through adoption of the final plan.
2. Public Education and Public Involvement/ Outreach	Build on existing stakeholder process for public involvement and outreach and initiate public education in local schools.	Initial meetings in second month with quarterly townhouse meetings with regular outreach education in schools at 10 and 20 months.
3. Agencies Coordination	Establish protocol for agency participation. Agencies include resource agencies and local jurisdictional agencies such as OES, Sheriffs, Public Works, etc.	Ongoing throughout final plan.
4. Goals and Objectives	Goals and objectives will be established at the initial stakeholder meetings.	Adopted in four to six months.
5. Scope of Work and Schedule	The Scope of Work and Schedule will be refined at initial stakeholder meetings.	Refined in five to seven months.
6. Hazards Evaluation	Flood hazards will be identified and evaluated.	Identification and evaluation completed in 12 months.
7. Hazards Mitigation Strategies and Measures	Information from the hazards evaluation mitigation providing the basis for identifying mitigation strategies and measures. Rescue and evacuation consideration, land use policies, and projects will be considered.	Identification and evaluation completed in months 12 to 20.
8. Draft Action Plan	Draft Plan will be prepared for review and comment through stakeholder process.	Month 2.
9. Final Action Plan	Following review by stakeholders and public, Plan will be finalized and provided as a template for use in other watersheds.	Month 2.

Described above is the general timeline for development of the Plan.

With adequate funding, the Floodplain Management Plan could be developed within a 24-month plan. Depending upon the outcome of the stakeholder process, it is possible that an additional 12-month period could be needed to completely engage the stakeholders and prepare the Plan. The need for an additional 12-month period will be evaluated and determined by the end of the first 12 months, at which point the flood hazards are planned to be identified and evaluated.

2. *Describe your qualifications and readiness to implement the proposed project.*

- a. *Describe the level of institutional structure, ability and experience to administer funds and conduct the project. Identify the fiscal agent responsible for handling the funds.*
- b. *Describe technical support available (including support needed for environmental compliance and permitting) to begin and complete the project in a timely manner.*
- c. *List any previous projects of this type you or your partners have implemented, funded either by CALFED or other programs.*

**Institutional Structure, Ability and Experience**

The partnership between the County of Butte and the Butte Creek Watershed Conservancy combines the resources of government and non-profit institutions. The Butte County Public Works Department administers the Butte County National Flood Insurance Program. The Butte County Office of Emergency Services (OES) has a Flood Mitigation Plan in effect. The Floodplain Management Plan will aid substantially in the service and response by OES. The Butte County Board of Supervisors has formerly stated their support for the Floodplain Management Plan. An experienced and qualified Project Contractor will be selected from the private sector (letter in packet).

**Butte County**

The Emergency Services Office, Land Development Division of Public Works, and the Water and Resource Conservation Department will provide these technical support services as an adjunct to the Project Contractor.

**Fiscal Agent**

The Butte County Auditor's Office will serve as the fiscal agent for the project grant. Butte County is well skilled in fiscal management of projects. Payment of invoices and conformance to CALFED accounting procedures and regulations will be handled by the Auditor's Office.

**Technical Support**

The Butte County Public Works Department will serve as Project Manager and review and administer subcontracts. Butte Creek Watershed Conservancy has available many sources of technical support. An experienced and qualified Project Contractor will be selected from the private sector to serve as Technical Manager to perform and manage work of the expertise involved.

**Emergency Services Officer:** Has managed flood fights, flood control projects totaling over \$7,000,000 through NRCS Emergency Watershed Protection Act, has served as local project manager for two U.S. Army Corps of Engineers (USACE) Emergency Flood Control Projects, local co-project manager for USACE 205 and USACE 1135 projects. Is an experienced grant manager having managed federal, state, and private grants over past 25 years. Participant on F&WS Habitat Evaluation Plan teams and serves on the River and San Joaquin River Comprehensive Study Team.

**Land Development Manager:** Is a Professional Engineer, Licensed Land Surveyor, and Flood Plain Manager. Serves as co-project manager with Emergency Services Officer. Routine duties include the effective management of multiple public works projects. Also experienced in Hydrology and Hydraulic Design. Also serves as team member on Comprehensive Study.

**Butte Creek Watershed Conservancy**

In addition to preparing an **Existing Conditions Report** and formulating a **Watershed Management Strategy**, the Conservancy obtained funding to develop a **Geographic Information System (GIS)** for the Butte Creek watershed. The CSUC Geographic Information Center (GIC) developed these comprehensive resource maps. This base map and updated data layers will be of great aid in the development of the Butte Creek Watershed Floodplain Management Plan.

By efficiently coordinating the flood management resources of local groups and agencies the Conservancy will play a vital role the development of the Flood Management Plan. The Conservancy will help in the facilitation of the public outreach by assisting a professional facilitator in a series of townhouse meetings and other meetings between interested parties. Through our own outreach resources, such as our web site, newsletter, and mailing lists and by coordinating the resources of other local watershed groups and agencies, the Conservancy will help to educate and inform the public of the ongoing efforts in the development of the Floodplain Management Plan.

**Project Coordinator (GIS):** Has performed as the Conservancy's Watershed Coordinator for 15 months. Licensed Land Surveyor in Training. GIS mapping experience. Highly developed communication, computer and writing skills. Personal knowledge of watershed groups, leaders and members. Played vital role in the preliminary development of this Plan.

**The Watershed Advisory Committee and Technical Advisory Committee:** This committee was originally formed to oversee the development of the Butte Creek Existing Conditions Report. Its members include private industry leaders, public agency heads, private landowners, and agricultural stakeholders.

**Other Technical Assistance** sources are (partial list) recent fluvial geomorphology studies, historical floodplain and levee information, OES Flood Hazard Mitigation plan, access to planning/land use maps, and public works structural plans. A Geographic Information System (GIS) now in place will be used to map, evaluate, and communicate the information collected during this project.

#### **Previous Projects (by Partners and Participants)**

The Butte Creek Watershed Conservancy is an AFRP (Anadromous Fish Restoration Program) Partner. The Butte Creek watershed is a priority project for the USFWS, CALFED, the U.S. Bureau of Reclamation (USBOR) and the California Department of Fish and Game (CDFG). Recognized as one of the last remaining natal streams of spring-run chinook salmon, which was listed as "threatened" under the California Endangered Species Act in August 1997, Butte Creek has been the focus of numerous studies and proposed projects.

#### **Projects Completed or in Preparation**

- **Developed Butte Creek Watershed Conservancy Watershed Management Strategy --** Landowners, residents, recreational user groups, CSU Chico, and local, and federal agencies have agreed to cooperate with the Butte Creek Watershed Conservancy (BCWC) in the formation Watershed Advisory Committee (WAC) to facilitate the development of a Watershed Management Strategy (WMS). The WMS's purpose is to protect and enhance critical habitat for anadromous fish (spring-run and fall-run chinook salmon and steelhead). The WMS will assist stakeholders in understanding the Butte Creek ecosystem and managing its natural resources.
- **Developed the Butte Creek Watershed Existing Conditions Report**
- **Flood control projects totaling over \$7,000,000, through NRCS Emergency Watershed Protection Act**
- **USACE Emergency Flood Control Projects**
- **Developed a Geographic Information System (GIS) for the Butte Creek watershed**
- **Constructed improved fish passage facilities at Parrot Phelan, Durham Mutual Water company, Rancho Esquon, Gorril Ranch, Western Canal Diversion, and plans and specifications are underway for 10 projects in the Butte Sink and the Sutter Bypass**
- **Continued the Lower Butte Creek Study, Phase 1b**
- **Extended Butte Creek geomorphic study to Butte Slough**
- **Promoted re-vegetation of recently riprapped areas in the vicinity of Okie Dam on Butte Creek**
- **Produced the Butte Creek Watershed Owner's Best Management Practices Manual**
- **Assisted locally led efforts to facilitate coordination of the Butte Sink/Sutter Bypass stakeholders**
- **Butte Creek spring-run chinook juvenile life history evaluation**
- **Evaluate the juvenile life history of spring-run chinook salmon in Butte and Big Chico Creeks**

3. ***Provide a completed budget cost sheet and describe the basis for determining project costs, including comparisons with other similar projects, salary comparisons, and other listed costs. Include all costs of environmental compliance, such as CEQA and/or NEPA, and permits. Describe how the approach to achieving the stated goals of the project demonstrates an effective cost relative to its anticipated benefits.***

A budget summary for developing a Floodplain Management Plan and a breakdown of costs, according to tasks, are enclosed in this packet.

The project costs were estimated by defining a Scope of Work and estimating the effort involved for various disciplines based to perform the work. The Scope of Work anticipates refinement early in the project with the benefit of public and stakeholder input. Salary compensations represent actual rates used with respect to personnel of Butte County and the Conservancy. The rates applied for the subcontracting represent averages in the industry for similar expertise.

The project, at this time, is limited to a “planning” effort, thus will be performed under a Categorical Exemption (CEQA) and Categorical Exclusion (NEPA). Implementation of the Plan, as a subsequent phase, will require the expenditure of funds for environmental compliance.



**4. Describe the technical feasibility of the proposed project.**

- a. Describe any similarity to previously implemented successful projects in this community or elsewhere.*
- b. If the project proposes a new approach or new method with a high likelihood of adding new knowledge and or techniques, or with the potential to fill identified gaps in existing knowledge, describe how it will do so, and what monitoring components will provide substantiation of results.*
- c. Explain how the finished project will be maintained as necessary, and to what degree it may require continued funding from outside the community.*

**a. Similarity to Previously Successful Projects**

The proposed project is unique in that a primary purpose is to establish a communication link involving five subareas of the Butte Creek watershed, each of which is different from the standpoint of its hydrologic, ecologic, and socioeconomic setting. Accordingly, public involvement and outreach to develop a true stakeholder-driven process is an extremely important aspect of the project. Important to note however, is that the stakeholder process established for developing the Floodplain Management Plan, is the foundation for implementing the Conservancy's entire Watershed Management Strategy.

For this reason, the Conservancy's long-term success will be influenced substantially on creating an effective stakeholder-driven process.

**b. New Approach or New Method**

As indicated previously, the formulation of a Floodplain Management Plan as the Conservancy's initial effort to implement its Watershed Management Strategy was a purposeful decision. The diverse ecologic and socioeconomic subareas have a common thread, "Butte Creek." A carefully crafted public involvement and public outreach plan is required to engage the stakeholders whose interests vary widely. It is recognized that although the formulation of a Floodplain Management Plan is central to the scope of this proposal, stakeholders, once engaged, will want to address issues that are extremely important to them but possibly not relevant to floodplain management. In this regard, the Conservancy will view this stakeholder process as an excellent opportunity to obtain meaningful input to other elements of its overall Watershed Management Strategy. Gaps in knowledge that exist currently include: (1) knowing what the important stakeholder issues are within the respective subareas, and (2) transferring awareness of these issues and interrelationships to stakeholders in other subareas.

The success of the stakeholder process will be determined by the relative participation of stakeholders throughout the project. The relative success or acceptance of the stakeholders will be gleaned from comments at the townhouse meetings, however, the Conservancy will have follow up communication with stakeholders to evaluate the process. The follow up information obtained from communication will be helpful in refining the overall public information and outreach program.

**c. Finished Project**

The product from this proposal will most probably result in an Action Program comprised of projects, studies, or investigations, and regulatory measures to eliminate or minimize hazards from flooding. The implementation of elements of the Action Program will require funding outside the community. The Conservancy's overall goal to link the Floodplain Management Plan with plans for other elements of its Watershed Management Strategy will most assuredly require funding from outside the community.

Implementation of the finished product (i.e., the Floodplain Management Plan) will be monitored by the Conservancy, with the Butte County Public Works Department continuing as Project Manager. Depending upon a particular Action Item, the entity responsible for implementation will be different. Once the scope of the Plan begins to emerge, Butte County and the Conservancy, in coordination with the Watershed Advisory Committee, will evaluate the institutional needs for implementation, maintenance, and monitoring. The public information and outreach will continue to keep the general public and stakeholders informed of progress.

5. *Describe how the monitoring component of the project will help determine the effectiveness of project implementation and assist the project proponent and CALFED with adaptive management processes.*

- a. Identify performance measures appropriate for the stated goals and objectives of the project.*
- b. Describe how this project will coordinate with and support other local and regional monitoring efforts.*
- c. Provide a description of any citizen monitoring programs that will be part of this project.*
- d. What monitoring protocols will be used, and are they widely accepted as standard protocols?*
- e. Describe how the type and manner of data collection and analysis will be useful for informing local decision-making?*

The Butte Creek Watershed Floodplain Management Plan will have several layers of monitoring, including landowner and citizen committees, local government involvement, technical monitoring, and a conference to solidify permanent partnerships in developing and implementing the Plan.

**a. Performance Measures**

This proposal aims to develop a Floodplain Management Plan, an important component of which is a public involvement and outreach program to develop a stakeholder-driven process. The implementation of a coordinated Floodplain Management Plan will achieve measurable benefits. The following is a short list of benefits that can be measured using appropriate and established measuring techniques: reducing water supply contamination by floodwaters, reducing silt loads on streams and tributaries, protecting groundwater quality from flooded wells, improving water quality derived from established Best Management Practices, coordinating flood hazard mitigation procedures, protecting wildlife habitat by adaptive management measures, increasing local stewardship values, and environmental education enhancements.

**b. Monitoring Coordination**

Monitoring coordination will be ongoing throughout this project. Approximately seven townhouse meetings will be conducted in different areas of the watershed. Two Floodplain Management Forums are anticipated that would be structured for the general public. The Butte Creek Watershed Conservancy will act as the main coordinating group for this project. The appropriate means and methods for monitoring and implementing the project will be determined as part of this proposed Scope of Work.

**c. Citizen Monitoring Programs**

The **Watershed Advisory Committee (WAC)** will be utilized as a citizen monitoring body. A **Planning Committee** of 10 to 15 people, representing local government staff and the public, to bring key stakeholders together. This committee can be a forum to review the needs and concerns of all interested groups, and a means for participants to keep their departments and the community up to date on the plan's progress. The importance of this approach is reflected in the credit points awarded by the CRS program. Having a planning committee with at least half of the members from the public is worth more points than any other single item in this CRS activity.

A **review and public comment** on the draft plan will be undertaken at the appropriate time.

**d. Monitoring Protocols**

The use of interdisciplinary integrated approach to problem solving.

Sustainability concerns.

Understanding the community's risks (identifying hazards, and determining risks).

Setting goals and priorities (using the results of risk assessment to review mitigation options and drafting a strategy).

Adopting and implementing the strategy; evaluating and revising the plan.

Relative benefit/cost analysis will be used throughout the Mitigation Planning Process.

**e. Informed Local Decision-Making**

The local townhouse meetings within each subarea(s), county departmental cooperation, private sector consultant services, federal and state information vectors, and individual stakeholders, will support data collection. This will ensure that the Floodplain Management Plan will build a constituency that wants to see the mitigation measures implemented. It will also aid to educate residents and other planning participants on available hazard and protection measures.

Analysis of the data will be undertaken through local private consultants that have demonstrated their knowledge and experience of the Butte Creek watershed floodplain. Coordinated analysis tasks between the consultants, private landowners, local government, and other stakeholders will ensure that activities are coordinated with each other and with other community goals and activities. This will help prevent conflicts and reduce the costs of implementation.

6. *If this project is to develop specific watershed conservation, maintenance or restoration actions, describe the scientific basis for the action(s) described in the proposal. Include the following:*
- a. *Any assessment of watershed condition(s) that has already been developed by you or others.*
  - b. *Previous assessment(s) used to establish your project goals and objectives, or to inform the basic assumptions of your proposal.*
  - c. *A description of the scientific assumptions used to develop the project goals, objectives and proposed actions, and the degree to which those assumptions are widely accepted (both in the science community as a whole, and in the watershed community.)*
  - d. *A discussion of how the proposed actions are (are not) consistent with the scientific assumptions and previous assessments completed in the watershed.*
  - e. *A description of what baseline knowledge was used to support the management actions described in the proposal, or the likelihood that the management actions will generate more robust baseline knowledge.*

**a. Previous Assessments**

An assessment of the condition of the Butte Creek watershed has not been performed to date. Currently underway, however, is a detailed fluvial geomorphologic analysis of Butte Creek from the Centerville Head Dam through the valley to Highway 162, a reach of nearly 35 miles. This analysis is being performed as it has the greatest potential for beneficial and destructive meanders and also the greatest potential to restore the riparian corridor.

**b. Basis for Goals and Objectives**

The project goals and objectives for the Floodplain Management Plan are presented in the Conservancy's, "Butte Creek Watershed Management Strategy," dated November 2000. The basis for developing the Watershed Management Strategy was presented in the Conservancy's, "Existing Conditions Report," dated April 2000. Dealing with floodplain management was one of several groups within which issues of concern to landowners, educators, conservationists, farmers, foresters, recreationists, and agency representatives were identified.

**c. Scientific Assumptions for Goals and Objectives**

The general approach and process to develop the Floodplain Management Plan follows the CRS Approach for Flood Mitigation Planning. This process is recognized by the National Flood Insurance Program's CRS. This process is encouraged by FEMA. An advantage of having the Floodplain Management Plan is that it is a prerequisite for various assistance programs, including FEMA's Flood Mitigation Assistance and Hazard Mitigation Grant programs and several flood control programs of the USACE. This approach has been used elsewhere as an aid in reducing flood insurance premiums for communities.

**d. Consistency with Previous Assessments**

The proposed project is a recommendation from work completed by the Conservancy. The Watershed Management Strategy received strong support from participating agencies and stakeholders.

**e. Baseline Knowledge Utilized**

The proposal to develop a Floodplain Management Plan is the next step in a deliberate process undertaken by the Conservancy to advance its vision statement:

*"The Butte County Watershed Conservancy Advisory Committee was formed to develop community-based consensus driven strategies that foster healthy fish populations, diverse biological habitats, recreational opportunities, reduced fire hazard, reliable and clean water, reduced flood damage, and a strong respect for private property rights."*

The preparation of the Existing Conditions Report and Watershed Management Strategy are products of the Conservancy's important process.

7.
  - a. *How will the proposal address multiple CALFED objectives (see Section I) in an integrated fashion, with emphasis on water supply reliability, water quality, ecosystem quality, and levee stability objectives CALFED has established for Stage 1 of the program?*
  - b. *Explain how the proposal will help define and illustrate relationships between watershed processes (including human elements), watershed management, and the primary goals and objectives of the CALFED (see Section I).*
  - c. *Identify a lead agency for environmental compliance, such as CEQA or NEPA. Describe the program strategy and timetable on environmental compliance.*

**a. CALFED Objectives**

This proposal to develop a Floodplain Management Plan for the watershed strongly addresses the objectives of CALFED's Watershed Program and incidentally addresses CALFED's objectives of Ecosystem Quality, Water Quality, and Levee System Integrity.

With respect to the Watershed Objectives, the following are highlighted:

***“Facilitate and improve coordination, collaboration, and assistance among government agencies, other organizations, and local watershed groups.”***

Significant progress was made toward this objective by the Conservancy in preparing the Existing Conditions Report and Watershed Management Strategy. The approach taken in this proposal will expand the geographic scope of coordination and collaboration with stakeholders throughout the watershed. The process will formalize interaction between the Conservancy, Butte County, and landowners, and between counties (Butte, Glenn, and Colusa) as well.

Through the public involvement and outreach effort, a network for communication among stakeholders within different ecologic areas will be initiated.

***“Develop watershed monitoring and assessment protocols.”***

During the course of developing the Floodplain Management Plan and performing outreach efforts, a plan will be crafted to monitor implementing the Floodplain Management Plan to facilitate constructive changes over time.

***“Support education and outreach.”***

This proposal deals with education, public involvement, and outreach. With the conduct of this effort during the course of developing the Floodplain Management Plan and feedback obtained, the program will be adapted to make it more effective in implementing the Floodplain Management Plan. The Conservancy's desire to improve education and outreach to ensure success in management of the watershed is this program's greatest ally.

***“Integrate the Watershed Program with other CALFED program elements.”***

Coordination among entities involved in CALFED-funded programs in Butte County is good. However, significant improvement will be made in conducting work outlined in this proposal. Work being performed under the Integrated Storage Investigation and Anadromous Fish Restoration programs are closely linked to floodplain management. Individuals and agency representatives are aware and desirous of the benefit gained from a coordinated effort, thus time will strengthen the integration of future activities.

***“Define the relationship between watershed processes and the goals and objectives of CALFED.”***

As noted earlier, the Floodplain Management Plan incidentally addresses the CALFED objectives of dealing with Ecosystem Quality, Water Quality, and Levee System Integrity. With Butte Creek being one of a few remaining habitats for spring-run chinook salmon, the environmental health of the watershed is critical to support the recovery of fish populations associated with the Bay-Delta.

Delta water quality will be beneficially impacted, albeit in a small way, by measures being implemented in the Butte Creek watershed to minimize sediment and contaminants entering the system.

Additionally, to the extent Action Items in the Floodplain Management Plan result in any attenuation of flood runoff, there could be incidental benefit to flood stages in the Delta.

***“Implement a strategy that will ensure support and long-term sustainability of local watershed activities.”***

This proposal is the next step toward the conservancy’s vision for the Butte Creek watershed. Since its inception in 1995, the Conservancy has had a goal to implement measures necessary to protect and enhance one of California’s most beautiful streams. Well-focused stewardship of the watershed is a prerequisite. The Conservancy, with Butte County, has been and is committed to restoring and enhancing the resources of the watershed.

**b. Relationships Between Watershed Processes**

The identification of flood hazards within the watershed will determine, to a great extent, the aspects of watershed processes and management that will be addressed. Accordingly, a relationship, if any, with the primary goals and objectives of CALFED cannot be defined at this time.

**c. Description of Baseline Knowledge**

For this planning study, environmental compliance, as stated in the Environmental Form, will be dealt with as a Categorical Exemption (CEQA) and Categorical Exclusion (NEPA).

Butte County is the lead agency for CEQA compliance.

**8. *Describe any other important aspects of your program that you could not address in the above items, and that you feel are critical to fully describing your project.***

The Butte Creek Watershed Conservancy was established in September 1995, to protect, restore, and enhance the cultural, economic, and ecological heritage of the Butte Creek watershed through cooperative landowner action. Since being established, the Conservancy has focused on defining a framework by which to advance its purpose.

The preparation of the Conservancy's, "Existing Conditions Report," dated April 2000, and the Watershed Management Strategy represent significant milestones. The culmination of this work and the relationships established with agencies and stakeholders, together with the support of Butte County, sets the Conservancy at the threshold of creating and advancing a process that will benefit the watershed and affected communities for years to come.

The Butte Creek watershed is comprised of five subareas whose hydrologic, ecologic, and socioeconomic characteristics are very different. The Conservancy's vision for education, public involvement, and outreach is to link stakeholders from these diverse subareas and promote a collaborative and coordinated approach to management of the watershed. The outreach will allow the counties, cities, towns, community associations, and landowners to communicate in a non-confrontational format to exchange ideas and build lasting partnerships. This will enhance and, in some instances, create new relationships so that in the future these same ties can be used to address other issues and concerns as outlined in the Butte Creek Watershed Management Strategy – other issues addressed outside CALFED Mandates.





# CALFED BAY-DELTA PROGRAM

## BUTTE CREEK WATERSHED FLOODPLAIN MANAGEMENT PLAN

### PROGRAM BUDGET AND PROJECT SUMMARY

Task	Description	Completion Date	Match Funds <sup>1</sup>	CALFED Funds	Total
<b>1</b>	<b>PROJECT MANAGEMENT AND ADMINISTRATION</b>	Ongoing – 24 Months			
<b>1.a.</b>	<b>Administrative</b>		25,340	0	25,340
	The fiscal agent for the project is Butte County. Project Management will be performed through the County Department of Public Works. This includes the handling and processing of invoices, managing consultant contract, budget reporting and control. These will be established in accordance with approved procedures, applicable laws and regulations of Butte County, and the respective funding entities.				
<b>1.b.</b>	<b>Technical</b>		11,780	25,920	37,700
	A Management Plan (MP) and Quality Assurance Plan (QAP) will be prepared at the onset of the work. These documents will be reviewed by the Conservancy Board of Directors for concurrence on the protocol for effective coordination and management of the work. The MP will incorporate the Watershed Advisory Committee into the overall management with meetings on a bimonthly basis. During the first three months, meetings may be required on a monthly basis to assure the program is initiated without conflict.				
<b>1.c.</b>	<b>Status Reports</b>		20,160	0	20,160
	Quarterly status reports will be submitted. Quarterly progress reports will describe activities undertaken and accomplishments, by task, during the report period. A brief description of the work scheduled in the next quarter will be provided with attention given to anticipated changes from the overall project schedule. The description of the work performed and accomplishments shall be sufficient to provide a basis for payment. Quarterly status reports will be submitted for tracking the budget.				
	<b>Task Product:</b> Quarterly reports on status of work and budget; quality assurance review.				
	<b>Success Criteria:</b> Status of the work and budget.				
<b>2.</b>	<b>PUBLIC EDUCATION AND PUBLIC INVOLVEMENT/OUTREACH</b>	Quarterly			
	The Butte Creek watershed will be addressed according to the geographic subareas identified in the Existing Conditions report. Four of the five geographic subareas				

Task	Description	Completion Date	Match Funds <sup>1</sup>	CALFED Funds	Total
	are: Butte Meadow Basin, Canyon Section, Valley Section, and Butte Basin. Although the Sutter Bypass is not relevant from the standpoint of floodplain management, it is from the standpoint of other resource considerations. For this reason, effort will be made to engage landowners within the Sutter Bypass subareas into the program.				
<b>2.a.</b>	<b>Formulate and Implement Public Education Plan</b>		0	42,130	42,130
	The Public Education Plan will target elementary schools within the watershed. The primary purpose is to introduce the concepts and benefits of watershed management generally, and to inform this important segment of the public of activities underway and later proposed for the Butte Creek watershed. The education plan will be formulated in consultation with teachers having expressed interest in watershed and resource management. It is anticipated that schools would be involved twice during the course of the program.				
<b>2.b.</b>	<b>Formulate and Implement Public Involvement/Outreach Program</b>		0	68,750	68,750
	<p>The stakeholders are an important part of the public involvement process. A customized database will be developed including landowners, civic organizations, water-related organizations, elected and appointed officials, special interest groups, and other pertinent stakeholders expected to have an interest in the program. The database will be used to provide public meeting notification, to distribute project newsletters and updates, and to communicate pertinent information to the general public. The database will identify stakeholders according to particular watershed subarea. The stakeholder process will be established with the intent of its continuing into implementation of the Floodplain Management Plan.</p> <p>The public involvement plan will include quarterly meetings with facilitated stakeholders within each subarea of the watershed, and two facilitated meetings to offer a forum for the general public, as part of a watershed awareness campaign.</p>				
<b>2.c.</b>	<b>Develop Newsletters and Media Relations</b>		0	19,840	19,840
	<p>Newsletters will be developed and distributed to educate residents, stakeholders, businesses, and other interested audiences. The newsletters will be timed to share information about the study and serve as an invitation to the public meetings.</p> <p>A broad-scale public campaign will be implemented to reach members throughout the watershed. Coverage by the local news media will be pursued. Information about the program and information produced will be posted on the Conservancy's web site, coordinated with other local publications, and aired on the local radio station.</p>				

Task	Description	Completion Date	Match Funds <sup>1</sup>	CALFED Funds	Total
	<b>Task Product:</b> Public Involvement Plan, Public Education Plan; Stakeholder Database; Facilitation of Stakeholder and Public Meetings, Sign-in Sheets, Agenda, Name Tags, Signage; Meeting Summaries; Program Newsletters				
	<b>Success Criteria:</b> Recurring Stakeholder Participation, Information Obtained From Stakeholder-Driven Process				
<b>3.</b>	<b>AGENCIES COORDINATION</b>	Ongoing – 24 Months			
<b>3.a.</b>	<b>Resource Agencies</b>		0	12,120	12,120
	Participation of resource agencies, federal and state, will be important to the overall success of this program. Involvement will occur in various areas. These include the quality assurance reviews, as discussed in Task 1.a., the stakeholder process, and as sources of data, information, pertinent to the watershed and its resources.				
<b>3.b.</b>	<b>Jurisdictional Agencies</b>		0	12,120	12,120
	Participation of jurisdictional agencies at the state and local levels will be important also. Particularly, in relation to public health and safety as it relates to rescue and evacuation operations and protection and repair of infrastructures such as water and wastewater service, transportation, etc. Many of the jurisdictional agencies have participated in the Watershed Advisory Committee. Participation by certain jurisdictions, for example, the Sheriff's Department and local fire departments, will be most extensive in identifying and evaluating hazards, as well as in formulating hazard mitigation strategies.				
	<b>Task Product:</b> N/A				
	<b>Success Criteria:</b> Active participation by agencies deemed critical to the outcome of the program.				
<b>4.</b>	<b>GOALS AND OBJECTIVES</b>	4 to 6 Months			
<b>4.a.</b>	<b>Obtain Watershed Advisory Committee Input</b>		0	3,040	3,040
	At the onset of the program, a meeting(s) will be held with the Project Team and the Watershed Advisory Committee. The primary focus of these initial meetings will be to formulate preliminary goals and objectives for the stakeholder-driven process and the Plan.				
<b>4.b.</b>	<b>Obtain Stakeholder Input</b>		0	17,400	17,400
	Facilitated townhouse meetings will be held with stakeholders in the respective watershed subareas. Besides introducing the stakeholders to the program, the first meeting will aim to gather input on goals and objectives for the Plan.				
<b>4.c.</b>	<b>Adopt Goals and Objectives</b>		0	2,440	2,440
	Using input from the meetings with the Watershed Advisory Committee and stakeholders, goals and objectives will be established. As noted above, goals and objectives will be articulated for the process, which is regarded as a significant				

Task	Description	Completion Date	Match Funds <sup>1</sup>	CALFED Funds	Total
	public involvement and outreach effort, and for the Floodplain Management Plan.				
	<b>Task Product:</b> Established goals and objectives.				
	<b>Success Criteria:</b> The extent to which they are stakeholder driven.				
<b>5.</b>	<b>SCOPE OF WORK AND SCHEDULE</b>	5 to 7 Months			
<b>5.a.</b>	<b>Refine Scope of Work</b>		0	6,600	6,600
	The general Scope of Work presented in this proposal needs to be developed with more specificity using information obtained from meetings of the Watershed Advisory Committee and facilitated meetings of the stakeholders. It is anticipated the refinement in scope will not necessarily modify the budget, but rather ensure the funds are allocated appropriately.				
<b>5.b.</b>	<b>Refine Schedules</b>		0	3,920	3,920
	The schedule for carrying out this program will be refined consistent with the refined Scope of Work.				
	<b>Task Product:</b> Refined Scope of Work and Schedule.				
	<b>Success Criteria:</b> Timely development of the task product.				
<b>6.</b>	<b>HAZARDS EVALUATION</b>	12 Months			
<b>6.a.</b>	<b>Identify Flood-Related Hazards</b>		0	80,020	80,020
	Hazards related to flooding will be identified from facilitated townhouse meetings with stakeholders and from information documented in reports and databases available from resource agencies. Digital aerial photographs of the watershed will be obtained to facilitate understanding of the watershed, its resources, and communication with the stakeholders. Field reconnaissance will be conducted by the technical staff to become knowledgeable of hazards and issues identified. Information available from the Office of Emergency Services, the Sheriff's Department, and other local offices will be useful in identifying the location and extent of flood hazards, as well. The hazards will be categorized as public health and safety issues or resource recovery and sustainability.				
<b>6.b.</b>	<b>Evaluate Flood-Related Hazards</b>		0	62,020	62,020
	The hazards identified in Task 6.a., will be evaluated in an attempt to put some dimension on seriousness. The extent to which recovery does or does not recover following a flood event will be assessed. Where hazards are determined significant but cannot be documented, a research or investigation task may be identified for inclusion in the Plan as an Action Item for future investigation. Where possible or appropriate, the adverse impact or damages resulting from the hazard will be estimated.				
<b>7.</b>	<b>HAZARD MITIGATION STRATEGIES AND MEASURES</b>	Months 12 to 20			
<b>7.a.</b>	<b>Identify Hazard Mitigation Strategies and Measures</b>		0	64,520	64,520

Task	Description	Completion Date	Match Funds <sup>1</sup>	CALFED Funds	Total
	Depending upon the particular hazards identified and evaluated in Task 6., alternative strategies or measures may be considered for mitigation (i.e., structural or nonstructural solutions to mitigating flood damage to property). Similarly, sediment or debris dams may be considered in lieu of implementing Best Management Practices to reduce erosion.				
<b>7.b.</b>	<b>Evaluate Hazard Mitigation Strategies and Measures</b>		0	65,320	65,320
	Means identified for mitigating flood hazards will be evaluated to determine the most cost-effective and environmentally acceptable. The Community Rating System of the National Flood Insurance Program outlines six mitigation strategies that provide an effective framework for evaluating measures. These will be applied for this program. The Technical Advisory Committee will be instrumental in assessing the relative merits of the respective strategies and measures from a technical standpoint. Where data and information may be lacking, such will be identified for a follow up program in order to adequately measure the potential of a particular measure. Each strategy and measure will be described in terms of purpose, location, benefit/accomplishment, environmental impact, cost, ability to implement, public/landowner participation, lead agency, and subareas affected.				
<b>7.c.</b>	<b>Prioritize Mitigation Strategies and Measures</b>		0	8,240	8,240
	Following identification and evaluation of the full array of strategies and measures to be considered as action items for the Floodplain Management Plan, they will be presented to stakeholders throughout the watershed through a facilitated process to determine relative merits and acceptability. Using information gleaned through the stakeholders, the strategies and measures will be prioritized for implementation.				
<b>7.d.</b>	<b>Develop Implementation Program and Costs</b>		0	14,750	14,750
	The strategies and measures that “survive” the test of stakeholder and public acceptance will be further defined in terms of implementation programs and projects, and they cost to implement estimated as well. These “action items” may take the form of projects, studies, ordinance, land use policies, application of best management practices, etc. An aspect of the implementation program will be the institutional arrangement for implementation, program maintenance, monitoring, continuation of public involvement and outreach, and coordination with other resource management efforts in the watershed.				
<b>8.</b>	<b>DRAFT ACTION PLAN</b>	Month 2	0	49,020	49,020
	The Watershed Floodplain Management Plan will embody Action Items that were determined through a well-structured stakeholder-driven process, to be worthy of implementation, and implementable by virtue of cooperative participation of public agencies, the private sector, and landowners. A draft Plan will be prepared for				

Task	Description	Completion Date	Match Funds <sup>1</sup>	CALFED Funds	Total
	widespread distribution for comment and input using the public education and public involvement/outreach processes applied throughout the course of the program. The document will also be posted on the Conservancy website. Following receipt of public and stakeholder input, the Conservancy, with the Watershed Advisory Committee and Technical Advisory Committee, will assess the overall strength and support of the Plan. Pending the results of this assessment, the Conservancy will determine whether to refine the Plan further and engage the stakeholders once again, or to move forward with finalizing the Plan.				
	<b>Task Product:</b> Draft Plan, public and stakeholder comments.				
	<b>Success Criteria:</b> Conservancy decision to finalize Plan.				
<b>9.</b>	<b>FINAL ACTION PLAN</b>	Month 2	0	24,340	24,340
	With the decision by the Conservancy from Task 8, the document will be finalized. The final document will provide the basis for seeking funding for implementation and can be used as a template for use in other watersheds.				
	<b>Task Product:</b> Final Plan.				
	<b>Success Criteria:</b> Endorsements by participating agencies and stakeholders.				
	<b>TOTAL</b>		<b>57,280</b>	<b>582,510</b>	<b>639,790</b>

**CALFED BAY-DELTA PROGRAM  
BUTTE CREEK WATERSHED FLOODPLAIN MANAGEMENT PLAN  
BUDGET SUMMARY**

Page 1 of 6

Task/Activity	Butte County & Conservancy			Subcontractors			Match	CALFED	Total
	Labor	Supplies	Travel	Labor	Materials	Travel			
1. PROJECT MANAGEMENT AND ADMINISTRATION									
1.a. Administrative	24,840	500	0	0	0	0	25,340	0	25,340
1.b. Technical	10,080	500	1,200	25,920	0	0	11,780	25,920	37,700
1.c. Status Reports	7,200	0	0	12,960	0	0	7,200	12,960	20,160
Subtotal	42,120	1,000	1,200	38,880	0	0	44,320	38,880	83,200
2. PUBLIC EDUCATION AND PUBLIC INVOLVEMENT/OUTREACH									
2.a. Formulate and Implement Public Education Plan	1,120	0	0	38,810	2,000	200	0	42,130	42,130
2.b. Formulate and Implement Public Involvement/Outreach Program	1,120	0	0	61,130	4,000	2,500	0	68,750	68,750
2.c. Develop Newsletters and Media Relations	560	0	0	18,080	1,000	200	0	19,840	19,840
Subtotal	2,800	0	0	118,020	7,000	2,900	0	130,720	130,720
3. AGENCIES COORDINATION									
3.a. Resource Agencies	4,480	0	500	5,640	0	1,500	0	12,120	12,120
3.b. Jurisdictional Agencies	4,480	0	500	5,640	0	1,500	0	12,120	12,120
Subtotal	8,960	0	1,000	11,280	0	3,000	0	24,240	24,240
4. GOALS AND OBJECTIVES									
4.a. Obtain Watershed Advisory Committee Input	560	0	0	2,280	0	200	0	3,040	3,040
4.b. Obtain Stakeholder Input	5,600	0	0	9,800	0	2,000	0	17,400	17,400
4.c. Adopt Goals and Objectives	560	0	0	1,880	0	0	0	2,440	2,440
Subtotal	6,720	0	0	13,960	0	2,200	0	22,880	22,880
5. SCOPE OF WORK AND SCHEDULE									
5.a. Refine Scope of Work	2,240	0	0	4,160	0	200	0	6,600	6,600
5.b. Refine Schedules	560	0	0	3,360	0	0	0	3,920	3,920
Subtotal	2,800	0	0	7,520	0	200	0	10,520	10,520
6. HAZARDS EVALUATION									
6.a. Identify Flood-Related Hazards	6,800	500	500	52,220	15,000	5,000	0	80,020	80,020
6.b. Evaluate Flood-Related Hazards	6,800	500	500	52,220	0	2,000	0	62,020	62,020
Subtotal	13,600	1,000	1,000	104,440	15,000	7,000	0	142,040	142,040
7. HAZARD MITIGATION STRATEGIES AND MEASURES									
7.a. Identify Hazard Mitigation Strategies and Measures	9,300	500	500	52,220	0	2,000	0	64,520	64,520
7.b. Evaluate Hazard Mitigation Strategies and Measures	9,300	500	500	53,020	0	2,000	0	65,320	65,320
7.c. Prioritize Mitigation Strategies and Measures	4,560	0	0	3,680	0	0	0	8,240	8,240
7.d. Develop Implementation Program and Costs	2,250	0	0	12,500	0	0	0	14,750	14,750
Subtotal	25,410	1,000	1,000	121,420	0	4,000	0	152,830	152,830
8. DRAFT ACTION PLAN	2,080	0	0	36,940	10,000	0	0	49,020	49,020
Subtotal	2,080	0	0	36,940	10,000	0	0	49,020	49,020
9. FINAL ACTION PLAN	1,840	0	0	12,500	10,000	0	0	24,340	24,340
Subtotal	1,840	0	0	12,500	10,000	0	0	24,340	24,340
<b>TOTAL</b>	<b>106,330</b>	<b>3,000</b>	<b>4,200</b>	<b>464,960</b>	<b>42,000</b>	<b>19,300</b>	<b>44,320</b>	<b>595,470</b>	<b>639,790</b>

**CALFED BAY-DELTA PROGRAM  
BUTTE CREEK WATERSHED FLOODPLAIN MANAGEMENT PLAN  
BUTTE COUNTY AND CONSERVANCY  
PERSONNEL EFFORT  
(hours)**

Page 2 of 6

Task/Activity		Personnel <sup>1</sup>						Total
		PM	ESO	ADM	AU	CL	GIS	
1.	PROJECT MANAGEMENT AND ADMINISTRATION							
	1.a. Administrative	192	0	192	48	48	0	480
	1.b. Technical	96	0	0	0	0	96	192
	1.c. Status Reports	96	0	0	0	0	0	96
	Subtotal	384	0	192	48	48	96	768
2.	PUBLIC EDUCATION AND PUBLIC INVOLVEMENT/OUTREACH							
	2.a. Formulate and Implement Public Education Plan	8	8	0	0	0	0	16
	2.b. Formulate and Implement Public Involvement/Outreach Program	8	8	0	0	0	0	16
	2.c. Develop Newsletters and Media Relations	4	4	0	0	0	0	8
	Subtotal	20	20	0	0	0	0	40
3.	AGENCIES COORDINATION							
	3.a. Resource Agencies	32	32	0	0	0	0	64
	3.b. Jurisdictional Agencies	32	32	0	0	0	0	64
	Subtotal	64	64	0	0	0	0	128
4.	GOALS AND OBJECTIVES							
	4.a. Obtain Watershed Advisory Committee Input	4	4	0	0	0	0	8
	4.b. Obtain Stakeholder Input	40	40	0	0	0	0	80
	4.c. Adopt Goals and Objectives	4	4	0	0	0	0	8
	Subtotal	48	48	0	0	0	0	96
5.	SCOPE OF WORK AND SCHEDULE							
	5.a. Refine Scope of Work	16	16	0	0	0	0	32
	5.b. Refine Schedules	4	4	0	0	0	0	8
	Subtotal	20	20	0	0	0	0	40
6.	HAZARDS EVALUATION							
	6.a. Identify Flood-Related Hazards	24	40	0	0	0	80	144
	6.b. Evaluate Flood-Related Hazards	24	40	0	0	0	80	144
	Subtotal	48	80	0	0	0	160	288
7.	HAZARD MITIGATION STRATEGIES AND MEASURES							
	7.a. Identify Hazard Mitigation Strategies and Measures	40	60	0	0	0	80	180
	7.b. Evaluate Hazard Mitigation Strategies and Measures	40	60	0	0	0	80	180
	7.c. Prioritize Mitigation Strategies and Measures	40	24	0	0	0	0	64
	7.d. Develop Implementation Program and Costs	30	0	0	0	0	0	30
	Subtotal	150	144	0	0	0	160	454
8.	DRAFT ACTION PLAN	8	8	0	0	0	32	48
	Subtotal	8	8	0	0	0	32	48
9.	FINAL ACTION PLAN	8	8	0	0	0	24	40
	Subtotal	8	8	0	0	0	24	40
	<b>TOTAL</b>	<b>750</b>	<b>392</b>	<b>192</b>	<b>48</b>	<b>48</b>	<b>472</b>	<b>1902</b>

<sup>1</sup> See attached list of acronyms.



**CALFED BAY-DELTA PROGRAM  
BUTTE CREEK WATERSHED FLOODPLAIN MANAGEMENT PLAN  
BUTTE COUNTY AND CONSERVANCY  
PROJECT BUDGET  
(dollars)**

Page 3 of 6

Task/Activity			PM	ESO	ADM	AU	CL	GIS	
			75.00	65.00	37.50	37.50	30.00	30.00	Total
1.	PROJECT MANAGEMENT AND ADMINISTRATION								
	1.a.	Administrative	14,400	0	7,200	1,800	1,440	0	24,840
	1.b.	Technical	7,200	0	0	0	0	2,880	10,080
	1.c.	Status Reports	7,200	0	0	0	0	0	7,200
		Subtotal	28,800	0	7,200	1,800	1,440	2,880	42,120
2.	PUBLIC EDUCATION AND PUBLIC INVOLVEMENT/OUTREACH								
	2.a.	Formulate and Implement Public Education Plan	600	520	0	0	0	0	1,120
	2.b.	Formulate and Implement Public Involvement/Outreach Program	600	520	0	0	0	0	1,120
	2c	Develop Newsletters and Media Relations	300	260	0	0	0	0	560
		Subtotal	1,500	1,300	0	0	0	0	2,800
3.	AGENCIES COORDINATION								
	3.a.	Resource Agencies	2,400	2,080	0	0	0	0	4,480
	3.b.	Jurisdictional Agencies	2,400	2,080	0	0	0	0	4,480
		Subtotal	4,800	4,160	0	0	0	0	8,960
4.	GOALS AND OBJECTIVES								
	4.a	Obtain Watershed Advisory Committee Input	300	260	0	0	0	0	560
	4.b.	Obtain Stakeholder Input	3,000	2,600	0	0	0	0	5,600
	4.c.	Adopt Goals and Objectives	300	260	0	0	0	0	560
		Subtotal	3,600	3,120	0	0	0	0	6,720
5.	SCOPE OF WORK AND SCHEDULE								
	5.a.	Refine Scope of Work	1,200	1,040	0	0	0	0	2,240
	5.b.	Refine Schedules	300	260	0	0	0	0	560
		Subtotal	1,500	1,300	0	0	0	0	2,800
6.	HAZARDS EVALUATION								
	6.a.	Identify Flood-Related Hazards	1,800	2,600	0	0	0	2,400	6,800
	6.b.	Evaluate Flood-Related Hazards	1,800	2,600	0	0	0	2,400	6,800
		Subtotal	3,600	5,200	0	0	0	4,800	13,600
7.	HAZARD MITIGATION STRATEGIES AND MEASURES								
	7.a.	Identify Hazard Mitigation Strategies and Measures	3,000	3,900	0	0	0	2,400	9,300
	7.b.	Evaluate Hazard Mitigation Strategies and Measures	3,000	3,900	0	0	0	2,400	9,300
	7.c.	Prioritize Mitigation Strategies and Measures	3,000	1,560	0	0	0	0	4,560
	7.d.	Develop Implementation Program and Costs	2,250	0	0	0	0	0	2,250
		Subtotal	11,250	9,360	0	0	0	4,800	25,410
8.	DRAFT ACTION PLAN		600	520	0	0	0	960	2,080
		Subtotal	600	520	0	0	0	960	2,080
9.0	FINAL ACTION PLAN		600	520	0	0	0	720	1,840
		Subtotal	600	520	0	0	0	720	1,840
<b>TOTAL</b>			<b>56,250</b>	<b>25,480</b>	<b>7,200</b>	<b>1,800</b>	<b>1,440</b>	<b>14,160</b>	<b>106,330</b>

CALFED BAY-DELTA PROGRAM  
BUTTE CREEK WATERSHED FLOODPLAIN MANAGEMENT PLAN  
SUBCONTRACTORS  
PERSONNEL EFFORT  
(hours)

Task/Activity			Personnel <sup>1</sup>												Total	
			TM	F	FA	HE	RP	G	S	B	ER	ECE	ACAD	WP		CL
1.	PROJECT MANAGEMENT AND ADMINISTRATION															
	1.a.	Administrative	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1.b.	Technical	192	0	0	0	0	0	0	0	0	0	0	0	192	
	1.c.	Status Reports	96	0	0	0	0	0	0	0	0	0	0	0	96	
		Subtotal	288	0	0	0	0	0	0	0	0	0	0	0	288	
2.	PUBLIC EDUCATION AND PUBLIC INVOLVEMENT/OUTREACH															
	2.a.	Formulate and Implement Public Education Plan	6	160	160	0	0	0	0	0	0	0	40	0	366	
	2.b.	Formulate and Implement Public Involvement/Outreach Program	8	258	258	0	0	0	0	0	0	0	40	0	564	
	2.c.	Develop Newsletters and Media Relations	8	96	40	0	0	0	0	0	0	0	20	0	164	
		Subtotal	22	514	458	0	0	0	0	0	0	0	100	0	1094	
3.	AGENCIES COORDINATION															
	3.a.	Resource Agencies	24	0	0	24	0	0	0	0	0	0	0	0	48	
	3.b.	Jurisdictional Agencies	24	0	0	24	0	0	0	0	0	0	0	0	48	
		Subtotal	48	0	0	48	0	0	0	0	0	0	0	0	96	
4.	GOALS AND OBJECTIVES															
	4.a.	Obtain Watershed Advisory Committee Input	8	0	0	8	0	0	0	0	0	0	8	0	24	
	4.b.	Obtain Stakeholder Input	40	0	0	40	0	0	0	0	0	0	8	0	88	
	4.c.	Adopt Goals and Objectives	8	0	0	4	0	0	0	0	0	0	8	0	20	
		Subtotal	56	0	0	52	0	0	0	0	0	0	24	0	132	
5.	SCOPE OF WORK AND SCHEDULE															
	5.a.	Refine Scope of Work	16	0	0	16	0	0	0	0	0	0	8	0	40	
	5.b.	Refine Schedules	16	0	0	8	0	0	0	0	0	0	8	0	32	
		Subtotal	32	0	0	24	0	0	0	0	0	0	16	0	72	
6.	HAZARDS EVALUATION															
	6.a.	Identify Flood-Related Hazards	60	0	0	96	100	24	120	24	24	24	8	16	576	
	6.b.	Evaluate Flood-Related Hazards	60	0	0	96	100	24	120	24	24	24	8	16	576	
		Subtotal	120	0	0	192	200	48	240	48	48	48	16	32	1152	
7.	HAZARD MITIGATION STRATEGIES AND MEASURES															
	7.a.	Identify Hazard Mitigation Strategies and Measures	60	0	0	96	100	24	120	24	24	24	8	16	576	
	7.b.	Evaluate Hazard Mitigation Strategies and Measures	60	0	0	96	100	24	128	24	24	24	8	16	584	
	7.c.	Prioritize Mitigation Strategies and Measures	8	0	0	24	0	0	0	0	0	0	4	0	36	
	7.d.	Develop Implementation Program and Costs	60	0	0	40	0	0	0	0	0	0	8	0	108	
		Subtotal	188	0	0	256	200	48	248	48	48	48	28	32	1304	
8.	DRAFT ACTION PLAN		60	0	0	80	0	16	80	16	16	16	40	80	0	404
		Subtotal	60	0	0	80	0	16	80	16	16	16	40	80	0	404
9.	FINAL ACTION PLAN		24	0	0	24	0	4	20	4	4	4	20	40	0	144
		Subtotal	24	0	0	24	0	4	20	4	4	4	20	40	0	144
TOTAL			838	514	458	676	400	116	588	116	116	116	380	304	64	4686

<sup>1</sup> See attached list of acronyms.

CALFED BAY-DELTA PROGRAM  
BUTTE CREEK WATERSHED FLOODPLAIN MANAGEMENT PLAN  
SUBCONTRACTORS  
PROJECT BUDGET  
(dollars)

Page 5 of 6

Task/Activity	TM	F	FA	HE	RP	G	S	B	ER	ECE	ACAD	WP	CL	
	135.00	125.00	100.00	100.00	70.00	100.00	100.00	90.00	100.00	100.00	65.00	50.00	35.00	Total
1. PROJECT MANAGEMENT AND ADMINISTRATION														
1.a. Administrative	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.b. Technical	25,920	0	0	0	0	0	0	0	0	0	0	0	0	25,920
1.c. Status Reports	12,960	0	0	0	0	0	0	0	0	0	0	0	0	12,960
Subtotal	38,880	0	0	0	0	0	0	0	0	0	0	0	0	38,880
2. PUBLIC EDUCATION AND PUBLIC INVOLVEMENT/OUTREACH														
2.a. Formulate and Implement Public Education Plan	810	20,000	16,000	0	0	0	0	0	0	0	0	2,000	0	38,810
2.b. Formulate and Implement Public Involvement/Outreach Program	1,080	32,250	25,800	0	0	0	0	0	0	0	0	2,000	0	61,130
2c Develop Newsletters and Media Relations	1,080	12,000	4,000	0	0	0	0	0	0	0	0	1,000	0	18,080
Subtotal	2,970	64,250	45,800	0	0	0	0	0	0	0	0	5,000	0	118,020
3. AGENCIES COORDINATION														
3.a. Resource Agencies	3,240	0	0	2,400	0	0	0	0	0	0	0	0	0	5,640
3.b. Jurisdictional Agencies	3,240	0	0	2,400	0	0	0	0	0	0	0	0	0	5,640
Subtotal	6,480	0	0	4,800	0	0	0	0	0	0	0	0	0	11,280
4. GOALS AND OBJECTIVES														
4.a Obtain Watershed Advisory Committee Input	1,080	0	0	800	0	0	0	0	0	0	0	400	0	2,280
4.b. Obtain Stakeholder Input	5,400	0	0	4,000	0	0	0	0	0	0	0	400	0	9,800
4.c. Adopt Goals and Objectives	1,080	0	0	400	0	0	0	0	0	0	0	400	0	1,880
Subtotal	7,560	0	0	5,200	0	0	0	0	0	0	0	1,200	0	13,960
5. SCOPE OF WORK AND SCHEDULE														
5.a. Refine Scope of Work	2,160	0	0	1,600	0	0	0	0	0	0	0	400	0	4,160
5.b. Refine Schedules	2,160	0	0	800	0	0	0	0	0	0	0	400	0	3,360
Subtotal	4,320	0	0	2,400	0	0	0	0	0	0	0	800	0	7,520
6. HAZARDS EVALUATION														
6.a. Identify Flood-Related Hazards	8,100	0	0	9,600	7,000	2,400	12,000	2,160	2,400	2,400	5,200	400	560	52,220
6.b. Evaluate Flood-Related Hazards	8,100	0	0	9,600	7,000	2,400	12,000	2,160	2,400	2,400	5,200	400	560	52,220
Subtotal	16,200	0	0	19,200	14,000	4,800	24,000	4,320	4,800	4,800	10,400	800	1,120	104,440
7. HAZARD MITIGATION STRATEGIES AND MEASURES														
7.a. Identify Hazard Mitigation Strategies and Measures	8,100	0	0	9,600	7,000	2,400	12,000	2,160	2,400	2,400	5,200	400	560	52,220
7.b. Evaluate Hazard Mitigation Strategies and Measures	8,100	0	0	9,600	7,000	2,400	12,800	2,160	2,400	2,400	5,200	400	560	53,020
7.c. Prioritize Mitigation Strategies and Measures	1,080	0	0	2,400	0	0	0	0	0	0	0	200	0	3,680
7.d. Develop Implementation Program and Costs	8,100	0	0	4,000	0	0	0	0	0	0	0	400	0	12,500
Subtotal	25,380	0	0	25,600	14,000	4,800	24,800	4,320	4,800	4,800	10,400	1,400	1,120	121,420
8. DRAFT ACTION PLAN	8,100	0	0	8,000	0	1,600	8,000	1,440	1,600	1,600	2,600	4,000	0	36,940
Subtotal	8,100	0	0	8,000	0	1,600	8,000	1,440	1,600	1,600	2,600	4,000	0	36,940
9.0 FINAL ACTION PLAN	3,240	0	0	2,400	0	400	2,000	360	400	400	1,300	2,000	0	12,500
Subtotal	3,240	0	0	2,400	0	400	2,000	360	400	400	1,300	2,000	0	12,500
TOTAL	113,130	64,250	45,800	67,600	28,000	11,600	58,800	10,440	11,600	11,600	24,700	15,200	2,240	464,960

**CALFED BAY-DELTA PROGRAM  
BUTTE CREEK WATERSHED FLOODPLAIN MANAGEMENT PLAN  
LEGEND OF ACRONYMS:**

ACAD	AutoCADD
ADM	Administrator
AU	Auditor
B	Biologist
CL	Clerical
ECE	Erosion Control Engineer
ER	Environmental Engineer
ESO	Emergency Services Officer
F	Facilitator
FA	Facilitator Assistant
G	Geologist
GIS	Geographic Information System Technician
HE	Hydrologic/Hydraulic Engineer
PM	Project Manager
RP	Resource Planner
S	CEQA/NEPA Compliance Specialist, Forest Management Specialist, Fisheries Management Specialist, Range Management Specialist, and Wildlife Management Specialist
TM	Technical Manager
WP	Word Processor